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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,100	05/29/2001	Robert L. Spencer	42390.P9902	8505

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EXAMINER	
JONES III, CLYDE H	
ART UNIT	**PAPER NUMBER**
2611	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/870,100	SPENCER, ROBERT L.	
	Examiner	Art Unit	
	Clyde H. Jones III	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference numeral 160. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 3, 4, 5, 6, 7, 8, 13, 14, 15, 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks III, et al. (US 2004/0255326 A1) in view of Kasriel et al. (US 6,721,780 B1).

In regards to claim 1, Hicks discloses the method comprising the steps of:

"receiving a digital broadcast signal to a digital television receiver" (broadband multimedia gateway – 100, fig.1 & fig. 2) "in a first computer" (BMG/computer; par. 21, lines 1-2 & par. 64, lines 1-6; par 50);

"processing the digital broadcast signal to extract enhanced content data" (Hicks' tuner/demodulator processes the transmission signals and extracts enhanced content data, i.e. information signals, video data text, inter alia; 120 – fig. 2; par. 39, lines 10-15 & par. 43, lines 1-3);

"storing the enhanced content data in the personal web server" reads on Hicks' BMG which functions as personal web server (160-fig.2) and stores the enhanced content data in memory 131 or 103 (par. 51 & par. 70, lines 1-9); and

"providing the enhanced content data stored in the personal web server to at least one client device" (Hicks' client device, i.e., an information appliance, with a web client/browser that receives information signals from the web server, e.g., the user/client receives a web page comprised of video data text, par. 70, lines 4-8 & par. 66, lines 8-10);

providing the enhanced content data to a personal web server responsive to a web browser request (par. 64, 73 & 70, lines 8-12; in which Hicks' user/client request an on-demand pay-per-view service through a web browser GUI, in which the web server (BMG) provides the enhanced content data associated with the request i.e. video data text is provided to the user through the web server);

As to "application program interface", Hicks is silent about it. However, Hicks discloses a web browser (par. 58, 25 & 51) running on the client therefore Hicks' system inherently has an API to perform as disclosed.

Hicks fails to disclose the further limitations "in a web browser cache", "interrogating the web browser cache with an application programming interface".

In an analogous art Kasriel teaches a user making a request to a web server 130 through a web client/browser 110 (fig. 1). Responsive to the request the web client looks for the requested data (i.e. "network objects") in a local web browser cache and if the data is not there the web client forwards the request to the web server where the data is retrieved (e.g. from the Internet) and then forwarded to the web client (col.4, lines 20-30). Kasriel further discloses that this increases the presentation speed of requested data (col. 4, lines 31-33).

It would be obvious to one skilled in the art at the time the invention was made to modify the system of Hicks to include the limitations "in a web browser cache", and "interrogating the web browser cache with an application programming interface" as taught by Kasriel for the advantage of reduced data access times (col. 4, lines 31-33).

In regards to claim 2, the limitations:

"wherein a synchronized web page on the personal web server is loaded to the client device" reads on Hicks' BMG generated web page automatically indicating to the user, through the web browser, new and current content is available, e.g. the "Top Ten Movies" web page displayed by the information appliance (client) is updated when new content is received by the BMG (par. 66, 70, and 74);

"instantiating a trigger synchronization server in the first computer" reads on Hicks' multimedia on-demand device (MODD) which is the part of the BMG that performs synchronization services on behalf of information appliances (clients), e.g., updating web browser GUI web pages (par. 80 & par. 70, lines 1-8);

"extracting content triggers from the enhanced content data" reads on Hicks' extraction of triggers, i.e., video data text and more specifically "content identifiers", which initiate the uploading and/or removing of data in memory (par. 39, 76 & 79);

"providing the content triggers to the synchronization server" and "receiving the content triggers to the trigger synchronization server" reads on Hicks' MODD storing the content triggers, i.e. content identifiers, in memory 103 (par. 75);

"instantiating a trigger synchronization client in a client device" and "wherein the trigger synchronization client is an object in the synchronized web page" reads on Hicks' movie-on-demand lineup (table) in a webpage, e.g., the "Top Ten Movies" list is a client to the MODD's services (par. 66, 70 & 80);

"providing the content triggers to the trigger synchronization client through a network" and "receiving the content triggers to the trigger synchronization client through

a network" reads on Hicks' sending the updated content trigger, i.e. content identifier, to the synchronized web page displayed by the client/web browser, i.e. the "Top Ten Movie" list on the web page displays different/updated content identifiers in the movies on-demand lineup (table) (par. 73 & 74).

In regards to claim 3, the limitation "the personal web server is simultaneously providing enhanced content data stored in the personal web server to a plurality of client devices and the trigger synchronization server is providing content triggers to at least one trigger synchronization client" reads on Hicks' BMG, i.e. personal web server and MODD, sending the content triggers/enhanced content data (content identifiers) to a web page displayed through the information appliances' web browser, thereby updating the table (e.g. "Top Ten Movies" list) in the web page (as described in claims 1 and 2).

In regards to claims 4 and 13, the limitation "the client device is receiving the content triggers wherein the content triggers update the trigger synchronization client to be displaying information synchronized to the digital broadcast signal on the client device" reads on Hicks' system sending an updated content identifier (e.g. a new list item) to the client/web browser, indicating new content (movie) is available, e.g., a list of movies is automatically updated on an "available movies web page" while the new content is being received by the BMG (par. 73).

In regards to claims 5 and 14, "the trigger synchronization server is providing triggers to a network connection by multicasting datagram packets to sockets using a transmission protocol" reads on Hicks' system communicating data to information appliances via Ethernet IP (par. 35).

In regards to claims 6 and 15, the limitation "the trigger synchronization client is receiving the datagram packets provided by the synchronization server though a network connection" reads on Hicks' system communicating data to information appliances via Ethernet IP (par. 35).

In regards to claims 7 and 16, "the client device is a second computer" is taught by Hicks (par. 21, lines 17-18).

In regards to claims 8 and 17, "the client device is an interactive tablet" is taught by Hicks (par. 21, lines 17-19).

In regards to claim 19, the limitation "the client device is a remote control device with a display panel" is taught by Hicks' client device (STB 300 – fig. 3), with a display panel (40), which remotely controls the playback of information stored in memory 103 of the BMG (par. 26 & 57);

4. Claims 10, 11, 12, 20, 21, 22, 23, 24, 25, 26, 27, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks III, et al. (US 2004/0255326 A1) in view of Kimmel et al. (US 6,281,790 B1) and in further view of Kasriel et al. (US 6,721,780 B1).

In regards to claims 10 and 20, Hicks discloses a system and instructions to direct a first processor (130 – fig. 2) to:

"receive a digital broadcast signal to a digital television receiver" (broadband multimedia gateway – 100, fig.1 & fig. 2) "in a first computer" (BMG/computer; par. 21, lines 1-2 & par. 64, lines 1-6; par 50);

"process the digital broadcast signal to extract enhanced content data" (Hicks' tuner/demodulator processes the transmission signals and extracts enhanced content data, i.e. information signals, video data text, inter alia; 120 – fig. 2; par. 39, lines 10-15 & par. 43, lines 1-3);

"store the enhanced content data in the personal web server" reads on Hicks' BMG which functions as personal web server (160-fig.2) and stores the enhanced content data in memory 131 or 103 (par. 51 & par. 70, lines 1-9); and

"provide the enhanced content data stored in the personal web server to at least one client device" (Hicks' client device, i.e., an information appliance, with a web client/browser that receives information signals from the web server, e.g., the user/client receives a web page comprised of video data text, par. 70, lines 4-8 & par. 66, lines 8-10); and

"machine readable media to store the instructions" (par. 81).

Hicks does not disclose "store the enhanced content data in a web browser cache", "interrogate the web browser cache with an application programming interface from a personal web server" and "provide the enhanced content data to the personal web server responsive to the application programming interface interrogating the web browser cache". However, Hicks discloses the enhanced content data is stored in the memory 131/103 (fig. 2; par. 50, lines 6-9) in which the enhanced content in the memory (cache) is provided to the personal web server (par. 22, lines 9-19, 74 and 75).

Kimmel discloses (col. 9, lines 21-27) that it is well known to have a PC with NT operating system configured along with Internet Explorer as a browser and a personal web server, i.e., (IIS – Internet Information Services) (col. 9, lines 23-25). Moreover, it is known that the Browser/Internet Explorer and the web server IIS, both operate through an API. Therefore it would have been obvious to one skilled in the art at the time the invention was made to modify Hicks with Kimmel in order to take advantage of the multitasking operating system of NT, to configure Hicks' BMG so the user is able to exploit the full use of the BMG to be a terminal user interface for browsing the Internet as well as being able to function as a web server for distributing enhanced content data to clients as disclosed by Hicks.

As to "web browser cache" Hicks in view of Kimmel do not disclose.

In an analogous art Kasriel teaches a user making a request to a web server 130 through a web client/browser 110 (fig. 1). Responsive to the request the web client looks for the requested data (i.e. "network objects") in a local web browser cache and if

the data is not there the web client forwards the request to the web server where the data is retrieved (e.g. from the Internet) and then forwarded to the web client (col.4, lines 20-30). Kasriel further discloses that this increases the presentation speed of requested data (col. 4, lines 31-33).

It would be obvious to one skilled in the art at the time the invention was made to modify the system of Hicks in view of Kimmel to include the limitation "web browser cache" as taught by Kasriel for the advantage of reduced data access times (col. 4, lines 31-33).

In regards to claims 11 and 21, Hicks in view of Kimmel and Kasriel disclose instructions to direct the first processor to do the following:

"instantiate a trigger synchronization server in the first computer" reads on Hicks' multimedia on-demand device (MODD) which is the part of the BMG that performs synchronization services on behalf of information appliances (clients), e.g., updating web browser GUI web pages (par. 80 & par. 70, lines 1-8);

"extract content triggers from the enhanced content data" reads on Hicks' extraction of triggers, i.e., video data text and more specifically "content identifiers", which initiate the uploading and/or removing of data in memory (par. 39, 76 & 79);

"provide the content triggers to the synchronization server" and "receive the content triggers to the trigger synchronization server" reads on Hicks' MODD storing the content triggers, i.e. content identifiers, in memory 103 (par. 75);

"provide the content triggers to the trigger synchronization client" and "receive the content triggers to the trigger synchronization client" reads on Hicks' sending the updated content trigger, i.e. content identifier, to the synchronized web page displayed by the client/web browser, i.e. the "Top Ten Movie" list on the web page displays different/updated content identifiers in the movies on-demand lineup (table) (par. 73 & 74).

"instantiate a trigger synchronization client in a client device" reads on Hicks' movie-on-demand lineup (table) in a webpage, e.g., the "Top Ten Movies" list is a client to the MODD's services (par. 66, 70 & 80);

the limitations "instructions for directing a second processor to" and "machine readable media to store the instructions" reads on Hicks' information appliances' processor 330 and memory 331 (fig. 3; par. 57 lines 1-7).

In regards to claims 12 and 22, the limitation "a personal web server to provide enhanced content data stored in the personal web server to a plurality of client devices while the trigger synchronization server is simultaneously providing content triggers to at least one trigger synchronization client" reads on Hicks' BMG, i.e. personal web server and MODD, sending the content triggers/enhanced content data (content identifiers) to a web page displayed through the information appliances' web browser, thereby updating the table (e.g. "Top Ten Movies" list) in the web page (as described in claims 10 and 11).

In regards to claim 23, the limitation "the client device is receiving the triggers wherein the content triggers update the trigger synchronization client to be displaying content synchronized to the digital broadcast signal on the client device" reads on Hicks' system sending an updated content identifier (e.g. a new list item) to the client/web browser, indicating new content (movie) is available, e.g., a list of movies is automatically updated on an "available movies web page" while the new content is being received by the BMG (par. 73).

In regards to claim 24, the limitation "the trigger synchronization server is providing the content triggers to a network connection by multicasting datagram packets to sockets using a transmission protocol" reads on Hicks' system communicating data to information appliances via Ethernet IP (par. 35).

In regards to claim 25, the limitation "the trigger synchronization client is receiving the datagram packets provided by the synchronization server though a network connection" reads on Hicks' system communicating data to information appliances via Ethernet IP (par. 35).

In regards to claim 26, "the client device is a second computer" is taught by Hicks (par. 21, lines 17-18).

In regards to claim 27, "the client device is an interactive tablet" is taught by Hicks (par. 21, lines 17-19).

In regards to claim 29, the limitation "the client device is a remote control device with a display panel" is taught by Hicks' client device (STB 300 – fig. 3), with a display panel (40), which remotely controls the playback of information stored in memory 103 of the BMG (par. 26 & 57).

5. Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks III, et al. (US 2004/0255326 A1) in view of Kasriel et al. (US 6,721,780 B1) as applied to claim 1 above, and further in view of Ellis et al. (US 2002/0028208 A1).

In regards to claims 9 and 18, Hicks in view of Kasriel teach a plurality of information appliances (digital televisions, computers, audio systems, electronic book displays, graphical tablets, mp3 players, set-top boxes, etc.) that can be connected to the in-home network as clients to the BMG (Hicks - par. 43).

However, Hicks in view of Kasriel fail to specifically disclose "the client device is a personal digital assistant".

In an analogous art Ellis discloses an interactive server/client home network that uses web pages to communicate information to client devices (par. 71, 110 & 93). Ellis

further discloses the client device is a personal digital assistant (PDA - fig. 5) because it is a suitable computer based remote access device (par. 92, lines 1-9).

It would be obvious to one skilled in the art at the time the invention was made to modify the system of Hicks to include the client device is a personal digital assistant as taught by Ellis because the use of PDAs as clients is well known in the art and for the added advantages of providing a client device that is capable of wireless communication in the home network, can organize personal data, and is capable of synchronizing information with other computers (Ellis - par. 92-93).

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks III, et al. (US 2004/0255326 A1) in view of Kimmel et al. (US 6,281,790 B1) and Kasriel et al. (US 6,721,780 B1) as applied to claim 20 above, and further in view of Ellis et al. (US 2002/0028208 A1).

In regards to claim 28, Hicks in view of Kimmel and Kasriel teach a plurality of information appliances (digital televisions, computers, audio systems, electronic book displays, graphical tablets, mp3 players, set-top boxes, etc.) that can be connected to the in-home network as clients to the BMG (Hicks - par. 43).

However, Hicks in view of Kimmel and Kasriel fail to specifically disclose "the client device is a personal digital assistant".

In an analogous art Ellis discloses an interactive server/client home network that uses web pages to communicate information to client devices (par. 71, 110 & 93). Ellis

further discloses the client device is a personal digital assistant (PDA - fig. 5) because it is a suitable computer based remote access device (par. 92, lines 1-9).

It would be obvious to one skilled in the art at the time the invention was made to modify the system of Hicks in view of Kimmel and Kasriel to include the client device is a personal digital assistant as taught by Ellis because the use of PDAs as clients is well known in the art and for the added advantages of providing a client device that is capable of wireless communication in the home network, can organize personal data, and is capable of synchronizing information with other computers (Ellis - par. 92-93).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clyde H. Jones III whose telephone number is 571-272-5946. The examiner can normally be reached on 9-5:30 p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJ.

HAI TRAN
PRIMARY EXAMINER